# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Ulf Mattsson et al.       Art Unit   : 2132
Serial No. : 09/721,942               Examiner : Minh Dinh
Filed      : November 27, 2000
Title      : DATA TYPE PRESERVING ENCRYPTION

**Mail Stop Amendment**
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

## REPLY TO ACTION OF MARCH 29, 2005

In reply to the Office Action of March 29, 2005, Applicant submits the following

remarks.

### Section 102 rejections

The Examiner rejected independent claims 1 and 7 as anticipated by *Morar et al.* (U.S.

Patent No. 6,678,822). It is respectfully submitted, however, that the subject matter of the

claimed invention is not disclosed in *Morar.*

Claim 1 recites

*"reading a data type of a first data element."*

As best understood, the Examiner considers this to occur when *Morar*'s data filter **15**

(see FIG. 2 & col. 8, line 55 to col. 9, line 14) reads a string, analyzes the contents of that string,

and then infers what type of string it has just read. For example, upon reading nine numbers in

the form "XXX-XX-XXXX." the data filter infers that it has just read a social security number

(col. 9, line 11). The data filter does not actually *read* a data type. Instead, it makes what

amounts to an educated guess. "Reading" is quite different from "guessing." Claim 1 does not

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recite *"guessing* a data type"; it recites *"reading* a data type." Therefore, *Morar* fails to disclose this first limitation of claim 1.

Claim 1 also recites

*"interpreting said data type to form a restricting character set."*

As best understood, the examiner considers this to occur, for example, when the data filter **15** identifies a word as a noun, and then replaces that noun, not just with any word, but with another noun. (col. 9, lines 7-9) In doing so, *Morar*'s data filter restricts valid *words*, not characters. In effect, *Morar* forms a "restricting *word* set," not a "restricting *character* set" as recited in the claim. There is no restriction on the *characters* that may form part of the noun. There is nothing to stop the data filter **15** from, for example, replacing the noun "year" with the noun "año" simply because "ñ" is not part of the English alphabet. Because *Morar*'s data filter apparently forms a "restricting word set," not a "restricting character set," *Morar* fails to teach this second limitation of claim 1.

Claim 1 also requires "encrypting each character of said first data element into an encrypted character selected from said restricting character set." Apparently, the Examiner considers the replacement of one noun with another to be a form of encryption. (col. 9, lines 7-9). However, to the extent this can be called encryption (given the absence of a decoding key), it is clear that these nouns may be different lengths. For example, the plaintext noun may be longer than the "encrypted" noun. Thus, *Morar* does not disclose "encrypting each character . . . into an encrypted character selected from said restricting character set" because not every character in the plaintext noun becomes part of the encrypted noun.

Claim 7 is patentable for at least the same reasons as claim 1.

The remaining claims are dependent on either claim 1 or claim 7, and are patentable for at least the same reasons. It is respectfully requested, therefore, that the Examiner's rejection be withdrawn.

The fact that the applicant has addressed certain comments of the examiner does not mean that the applicant concedes any positions of the examiner. The fact that the applicant has
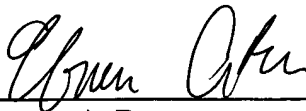
asserted certain grounds for the patentability of a claim does not mean that there are not other good grounds for patentability of that claim or other claims.

Enclosed is a $120 check for the Petition for Extension of Time fee. Please apply any other charges or credits to deposit account 06-1050.

Respectfully submitted,

Date: 7/29/05

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